

LIST OF CLAIMS

1. (currently amended). A method for inducing ~~or enhancing~~ chondrogenesis comprising the ~~step~~ steps of ~~culturing~~ contacting chondrocytes ~~in vitro~~ with a ~~matrix~~ composition consisting of (a) an extracellular matrix comprising type I collagen and (b) an effective amount of BMP-4 sufficient to induce or enhance chondrogenesis and culturing said chondrocytes in vitro with said composition.

2. (currently amended). A method for inducing ~~or enhancing~~ chondrogenesis comprising the ~~step~~ steps of ~~culturing~~ contacting chondrocytes ~~in vitro~~ with a ~~matrix~~ composition consisting of (a) an extracellular matrix comprising type II collagen and (b) an effective amount of BMP-4 sufficient to induce or enhance chondrogenesis and culturing said chondrocytes in vitro with said composition.

3-9. (Cancelled)

10. (previously amended) A method according to claim 1 or 2 wherein said chondrocytes are from joint tissue.

11-24. (cancelled)

25. (currently amended). A method according to claim 1 [, 2, 20, or 21] or 2 further comprising the step of subsequently implanting said matrix containing said chondrocytes into a site *in vivo* of desired chondrogenesis.

26. (currently amended) A method according to claim 1 [, 2, 20 or 21] or 2 wherein said matrix is formed by lyophilization of a dispersion of collagen fibers.